

Environmental Protection Agency

§ 132.6

the submission and a final rule in the FEDERAL REGISTER identifying the provisions of part 132 that shall apply to discharges within the State or Federal Indian reservation.

(g) EPA's approval or disapproval of a State or Tribal submission shall be based on the requirements of this part and of the Clean Water Act. EPA's determination whether the criteria, methodologies, policies, and procedures in a State or Tribal submission are consistent with the requirements of this part will be based on whether:

(1) *For pollutants listed in Tables 1, 2, 3, and 4 of this part.* The Great Lakes State or Tribe has adopted numeric water quality criteria as protective as each of the numeric criteria in Tables 1, 2, 3, and 4 of this part, taking into account any site-specific criteria modifications in accordance with procedure 1 of appendix F of this part;

(2) *For pollutants other than those listed in Tables 1, 2, 3, 4, and 5 of this part.* The Great Lakes State or Tribe demonstrates that either:

(i) It has adopted numeric criteria in its water quality standards that were derived, or are as protective as or more protective than could be derived, using the methodologies in appendixes A, B, C, and D of this part, and the site-specific criteria modification procedures in accordance with procedure 1 of appendix F of this part; or

(ii) It has adopted a procedure by which water quality-based effluent limits and total maximum daily loads are developed using the more protective of:

(A) Numeric criteria adopted by the State into State water quality standards and approved by EPA prior to March 23, 1997; or

(B) Water quality criteria and values derived pursuant to §132.4(c); and

(3) *For methodologies, policies, and procedures.* The Great Lakes State or Tribe has adopted methodologies, policies, and procedures as protective as the corresponding methodology, policy, or procedure in §132.4. The Great Lakes State or Tribe may adopt provisions that are more protective than those contained in this part. Adoption of a more protective element in one provision may be used to offset a less protective element in the same provision as long as the adopted provision is as

protective as the corresponding provision in this part; adoption of a more protective element in one provision, however, is not justification for adoption of a less protective element in another provision of this part.

(h) A submission by a Great Lakes State or Tribe will need to include any provisions that EPA determines, based on EPA's authorities under the Clean Water Act and the results of consultation under section 7 of the Endangered Species Act, are necessary to ensure that water quality is not likely to jeopardize the continued existence of any endangered or threatened species listed under section 4 of the Endangered Species Act or result in the destruction or adverse modification of such species' critical habitat.

(i) EPA's approval of the elements of a State's or Tribe's submission will constitute approval under section 118 of the Clean Water Act, approval of the submitted water quality standards pursuant to section 303 of the Clean Water Act, and approval of the submitted modifications to the State's or Tribe's NPDES program pursuant to section 402 of the Clean Water Act.

[60 FR 15387, Mar. 23, 1995, as amended at 65 FR 67650, Nov. 13, 2000]

§132.6 Application of part 132 requirements in Great Lakes States and Tribes.

(a) Effective September 5, 2000, the requirements of Paragraph C.1 of Procedure 2 in Appendix F of this Part and the requirements of paragraph F.2 of Procedure 5 in Appendix F of this Part shall apply to discharges within the Great Lakes System in the State of Indiana.

(b) Effective September 5, 2000, the requirements of Procedure 3 in Appendix F of this Part shall apply for purposes of developing total maximum daily loads in the Great Lakes System in the State of Illinois.

(c) Effective September 5, 2000, the requirements of Paragraphs C.1 and D of Procedure 6 in Appendix F of this Part shall apply to discharges within the Great Lakes System in the States of Indiana, Michigan and Ohio.

(d) Effective November 6, 2000, §132.4(d)(2) shall apply to waters designated as "Class D" under section

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701.9 of Title 6 of the New York State Codes, Rules and Regulations within the Great Lakes System in the State of New York. For purposes of this paragraph, chronic water quality criteria and values for the protection of aquatic life adopted or developed pursuant to §132.4(a) through (c) are the criteria and values adopted or developed by New York State Department of Environmental Conservation (see section 703.5 of Title 6 of the New York State Codes, Rules and Regulations) and approved by EPA under section 303(c) of the Clean Water Act.

(e) Effective November 6, 2000, the criteria for mercury contained in Table 4 of this part shall apply to waters within the Great Lakes System in the State of New York.

(f) Effective December 6, 2000, the acute and chronic aquatic life criteria for copper and nickel in Tables 1 and 2 of this part and the chronic aquatic life criterion for endrin in Table 2 of this part shall apply to the waters of the Great Lakes System in the State of Wisconsin.

(g) Effective February 5, 2001, the chronic aquatic life criterion for selenium in Table 2 of this part shall apply to the waters of the Great Lakes System in the State of Wisconsin.

(h) Effective December 6, 2000, the requirements of procedure 3 in appendix F of this part shall apply for purposes of developing total maximum daily loads in the Great Lakes System in the State of Wisconsin.

(i) Effective December 6, 2000, the requirements of paragraphs D and E of procedure 5 in appendix F of this part shall apply to discharges within the Great Lakes System in the State of Wisconsin.

(j) Effective December 6, 2000, the requirements of paragraph D of procedure 6 in appendix F of this part shall apply to discharges within the Great Lakes System in the State of Wisconsin.

[65 FR 47874, Aug. 4, 2000, as amended at 65 FR 59737, Oct. 6, 2000; 65 FR 66511, Nov. 6, 2000]

TABLES TO PART 132

TABLE 1—ACUTE WATER QUALITY CRITERIA FOR PROTECTION OF AQUATIC LIFE IN AMBIENT WATER

EPA recommends that metals criteria be expressed as dissolved concentrations (see appendix A, I.A.4 for more information regarding metals criteria).

(a)

Chemical	CMC (µg/L)	Conversion factor (CF)
Arsenic (III)	^{a,b} 339.8	1.000
Chromium (VI)	^{a,b} 16.02	0.982
Cyanide	^c 22	n/a
Dieldrin	^d 0.24	n/a
Endrin	^d 0.086	n/a
Lindane	^d 0.95	n/a
Mercury (II)	^{a,b} 1.694	0.85
Parathion	^d 0.065	n/a

^aCMC=CMC^{tr}.

^bCMC^d=(CMC^{tr}) CF. The CMC^d shall be rounded to two significant digits.

^cCMC should be considered free cyanide as CN.

^dCMC=CMCⁱ.

Notes:

The term “n/a” means not applicable.

CMC is Criterion Maximum Concentration.

CMC^{tr} is the CMC expressed as total recoverable.

CMC^d is the CMC expressed as a dissolved concentration.

CMCⁱ is the CMC expressed as a total concentration.

(b)

Chemical	m _A	b _A	Conversion factor (CF)
Cadmium ^{a,b}	1.128	−3.6867	0.85
Chromium (III) ^{a,b}	0.819	+3.7256	0.316
Copper ^{a,b}	0.9422	−1.700	0.960
Nickel ^{a,b}	0.846	+2.255	0.998
Pentachlorophenol ^c	1.005	−4.869	n/a
Zinc ^{a,b}	0.8473	+0.884	0.978

^aCMC^{tr}=exp {m_A [ln (hardness)]+b_A}.

^bCMC^d=(CMC^{tr}) CF. The CMC^d shall be rounded to two significant digits.

^cCMCⁱ=exp m_A {[pH]+b_A}. The CMCⁱ shall be rounded to two significant digits.

Notes:

The term “exp” represents the base e exponential function.

The term “n/a” means not applicable.

CMC is Criterion Maximum Concentration.

CMC^{tr} is the CMC expressed as total recoverable.

CMC^d is the CMC expressed as a dissolved concentration.

CMCⁱ is the CMC expressed as a total concentration.

[60 FR 15387, Mar. 23, 1995, as amended at 65 FR 35286, June 2, 2000]

TABLE 2—CHRONIC WATER QUALITY CRITERIA FOR PROTECTION OF AQUATIC LIFE IN AMBIENT WATER

EPA recommends that metals criteria be expressed as dissolved concentrations (see appendix A, I.A.4 for more information regarding metals criteria).

(a)

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Chemical	CCC (µg/L)	Con- version factor (CF)
Arsenic (III)	a,b 147.9	1.000
Chromium (VI)	a,b 10.98	0.962
Cyanide	c 5.2	n/a
Dieldrin	d 0.056	n/a
Endrin	d 0.036	n/a
Mercury (II)	a,b 0.9081	0.85
Parathion	d 0.013	n/a
Selenium	a,b 5	0.922

^a CCC=CCC^{tr}.
^b CCC^d=(CCC^{tr}) CF. The CCC^d shall be rounded to two significant digits.

^c CCC should be considered free cyanide as CN.
^d CCC=CCC^t.

Notes:
The term "n/a" means not applicable.
CCC is Criterion Continuous Concentration.
CCC^{tr} is the CCC expressed as total recoverable.
CCC^d is the CCC expressed as a dissolved concentration.
CCC^t is the CCC expressed as a total concentration.

(b)

Chemical	m _c	b _c	Con- version factor (CF)
Cadmium ^{a,b}	0.7852	-2.715	0.850
Chromium (III) ^{a,b}	0.819	+0.6848	0.860
Copper ^{a,b}	0.8545	-1.702	0.960
Nickel ^{a,b}	0.846	+0.0584	0.997
Pentachlorophenol ^c	1.005	-5.134	n/a
Zinc ^{a,b}	0.8473	+0.884	0.986

^a CCC^{tr}=exp {m_c[ln (hardness)]+b_c}.
^b CCC^d=(CCC^{tr}) (CF). The CCC^d shall be rounded to two significant digits.

^c CMC^t=exp {m_A[pH]+b_A}. The CMC^t shall be rounded to two significant digits.

Notes:
The term "exp" represents the base e exponential function.
The term "n/a" means not applicable.
CCC is Criterion Continuous Concentration.
CCC^{tr} is the CCC expressed as total recoverable.
CCC^d is the CCC expressed as a dissolved concentration.
CCC^t is the CCC expressed as a total concentration.

TABLE 3—WATER QUALITY CRITERIA FOR PROTECTION OF HUMAN HEALTH

Chemical	HNV (µg/L)		HCV (µg/L)	
	Drink- ing	Non- drink- ing	Drink- ing	Non- drink- ing
Benzene	1.9E1	5.1E2	1.2E1	3.1E2
Chlordane	1.4E-3	1.4E-3	2.5E-4	2.5E-4
Chlorobenzene	4.7E2	3.2E3		
Cyanides	6.0E2	4.8E4		
DDT	2.0E-3	2.0E-3	1.5E-4	1.5E-4
Dieldrin	4.1E-4	4.1E-4	6.5E-6	6.5E-6
2,4-Dimethylphenol	4.5E2	8.7E3		
2,4-Dinitrophenol	5.5E1	2.8E3		
Hexachlorobenzene ...	4.6E-2	4.6E-2	4.5E-4	4.5E-4
Hexachloroethane	6.0	7.6	5.3	6.7
Lindane	4.7E-1	5.0E-1		
Mercury ¹	1.8E-3	1.8E-3		
Methylene chloride	1.6E3	9.0E4	4.7E1	2.6E3
2,3,7,8-TCDD	6.7E-8	6.7E-8	8.6E-9	8.6E-9
Toluene	5.6E3	5.1E4		
Toxaphene			6.8E-5	6.8E-5
Trichloroethylene			2.9E1	3.7E2

¹ Includes methylmercury.

[60 FR 15387, Mar. 23, 1995, as amended at 62 FR 11731, Mar. 12, 1997; 62 FR 52924, Oct. 9, 1997]

TABLE 4—WATER QUALITY CRITERIA FOR PROTECTION OF WILDLIFE

Chemical	Criteria (µg/L)
DDT and metabolites	1.1E-5
Mercury (including methylmercury)	1.3E-3
PCBs (class)	1.2E-4
2,3,7,8-TCDD	3.1E-9

[60 FR 15387, Mar. 23, 1995, as amended at 62 FR 11731, Mar. 12, 1997]

TABLE 5—POLLUTANTS SUBJECT TO FEDERAL, STATE, AND TRIBAL REQUIREMENTS

Alkalinity
Ammonia
Bacteria
Biochemical oxygen demand (BOD)
Chlorine
Color
Dissolved oxygen
Dissolved solids
pH
Phosphorus
Salinity
Temperature
Total and suspended solids
Turbidity

TABLE 6—POLLUTANTS OF INITIAL FOCUS IN THE GREAT LAKES WATER QUALITY INITIATIVE

A. Pollutants that are bioaccumulative chemicals of concern (BCCs):

Chlordane
4,4'-DDD; p,p'-DDD; 4,4'-TDE; p,p'-TDE
4,4'-DDE; p,p'-DDE
4,4'-DDT; p,p'-DDT
Dieldrin
Hexachlorobenzene
Hexachlorobutadiene; hexachloro-1, 3-butadiene

Hexachlorocyclohexanes; BHCs
alpha-Hexachlorocyclohexane; alpha-BHC
beta-Hexachlorocyclohexane; beta-BHC
delta-Hexachlorocyclohexane; delta-BHC
Lindane; gamma-hexachlorocyclohexane; gamma-BHC

Mercury
Mirex
Octachlorostyrene
PCBs; polychlorinated biphenyls
Pentachlorobenzene
Photomirex
2,3,7,8-TCDD; dioxin
1,2,3,4-Tetrachlorobenzene
1,2,4,5-Tetrachlorobenzene Toxaphene

B. Pollutants that are not bioaccumulative chemicals of concern:

Acenaphthene
Acenaphthylene
Acrolein; 2-propenal

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Acrylonitrile	1,2-Diphenylhydrazine
Aldrin	Endosulfan; thiodan
Aluminum	alpha-Endosulfan
Anthracene	beta-Endosulfan
Antimony	Endosulfan sulfate
Arsenic	Endrin
Asbestos	Endrin aldehyde
1,2-Benzanthracene; benz[a]anthracene	Ethylbenzene
Benzene	Fluoranthene
Benzidine	Fluorene; 9H-fluorene
Benzo[a]pyrene; 3,4-benzopyrene	Fluoride
3,4-Benzofluoranthene;	Guthion
benzo[b]fluoranthene	Heptachlor
11,12-Benzofluoranthene;	Heptachlor epoxide
benzo[k]fluoranthene	Hexachlorocyclopentadiene
1,12-Benzoperylene; benzo[ghi]perylene	Hexachloroethane
Beryllium	Indeno[1,2,3-cd]pyrene; 2,3-o-phenylene py-
Bis(2-chloroethoxy) methane	rene
Bis(2-chloroethyl) ether	Isophorone
Bis(2-chloroisopropyl) ether	Lead
Bromoform; tribromomethane	Malathion
4-Bromophenyl phenyl ether	Methoxychlor
Butyl benzyl phthalate	Methyl bromide; bromomethane
Cadmium	Methyl chloride; chloromethane
Carbon tetrachloride; tetrachloromethane	Methylene chloride; dichloromethane
Chlorobenzene	Napthalene
p-Chloro-m-cresol; 4-chloro-3-methylphenol	Nickel
Chlorodibromomethane	Nitrobenzene
Chlorethane	2-Nitrophenol
2-Chloroethyl vinyl ether	4-Nitrophenol
Chloroform; trichloromethane	N-Nitrosodimethylamine
2-Chloronapthalene	N-Nitrosodiphenylamine
2-Chlorophenol	N-Nitrosodipropylamine; N-nitrosodi-n-
4-Chlorophenyl phenyl ether	propylamine
Chlorpyrifos	Parathion
Chromium	Pentachlorophenol
Chrysene	Phenanthrene
Copper	Phenol
Cyanide	Iron
2,4-D; 2,4-Dichlorophenoxyacetic acid	Pyrene
DEHP; di(2-ethylhexyl) phthalate	Selenium
Diazinon	Silver
1,2,5,6-Dibenzanthracene;	1,1,2,2-Tetrachloroethane
dibenz[a,h]anthracene	Tetrachloroethylene
Dibutyl phthalate; di-n-butyl phthalate	Thallium
1,2-Dichlorobenzene	Toluene; methylbenzene
1,3-Dichlorobenzene	1,2,4-Trichlorobenzene
1,4-Dichlorobenzene	1,1,1-Trichloroethane
3,3'-Dichlorobenzidine	1,1,2-Trichloroethane
Dichlorobromomethane;	Trichloroethylene; trichloroethene
bromodichloromethane	2,4,6-Trichlorophenol
1,1-Dichloroethane	Vinyl chloride; chloroethylene;
1,2-Dichloroethane	chloroethene
1,1-Dichloroethylene; vinylidene chloride	Zinc
1,2-trans-Dichloroethylene	
2,4-Dichlorophenol	
1,2-Dichloropropane	
1,3-Dichloropropene; 1,3-dichloropropylene	
Diethyl phthalate	
2,4-Dimethylphenol; 2,4-xenol	
Dimethyl phthalate	
4,6-Dinitro-o-cresol; 2-methyl-4,6-	
dinitrophenol	
2,4-Dinitrophenol	
2,4-Dinitrotoluene	
2,6-Dinitrotoluene	
Diocetyl phthalate; di-n-octyl phthalate	

**APPENDIX A TO PART 132—GREAT LAKES
WATER QUALITY INITIATIVE METH-
ODOLOGIES FOR DEVELOPMENT OF
AQUATIC LIFE CRITERIA AND VAL-
UES**

**METHODOLOGY FOR DERIVING AQUATIC LIFE
CRITERIA: TIER I**

Great Lakes States and Tribes shall adopt provisions consistent with (as protective as) this appendix.